

Inputs to MCTestAnalysis Program

The program MCTestAnalysis requires two simple input files to work. These inputs are in tabular form generated with Microsoft excel or any other spreadsheet program, and saved as **CSV files**.

The first input file is a CSV file that holds the answer key, a short title to each question and the concept number it corresponds to. Look at the example CSV file below (Figure 1).

- The first row is a header with a blank cell, Answer, Title and Concepts written to it.

Below the first row

- The first column has question number Q1...Q12,
- The second column has the correct answer choice for each question,
- The third column is a short title of each question (keep it short to about 10 characters), and
- The fourth column is the concept the question belongs to.

Figure 1. Example input file for the answer key

	Answer	Title	Concepts
Q1	2	Addition 1	A
Q2	3	Addition 2	A
Q3	4	Addition 3	A
Q4	4	Addition 4	A
Q5	3	Multiply 1	B
Q6	2	Multiply 2	B
Q7	1	Multiply 3	B
Q8	3	Multiply 4	B
Q9	2	Divide 1	C
Q10	2	Divide 2	C
Q11	3	Divide 3	C
Q12	4	Divide 4	C

An example answer file can be downloaded from

http://www.eng.usf.edu/~kaw/MCTestAnalysis/sample_answer_key.csv

The second input file is a CSV file that holds the answers given to the questions by each student. Look at the example CSV file below (Figure 2).

- The first row is a header with a blank cell, and the question numbers such as Q1, Q2, etc.

Below the first row

- The first column has the identification of the student. It could be a name or a random number if you want to de-identify the file.

- The second column has the answer choices for Q1, the third column has the answer choices for Q2, and so on.

Figure 1. Example input file for the student answers

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
Student1	4	3	2	4	4	1	3	3	4	2	4	4
Student2	4	4	2	4	3	4	3	3	1	1	1	1
Student3	3	3	3	4	1	2	2	4	3	2	4	4
Student4	3	2	2	4	3	2	2	3	2	1	3	2
Student5	1	3	2	4	3	2	2	1	1	2	3	4
Student6	2	3	4	2	1	1	2	4	1	2	1	1
Student7	4	3	4	4	3	2	2	3	2	2	3	1
Student8	4	4	3	4	2	3	2	1	1	2	1	2
Student9	4	3	4	4	3	2	2	2	1	4	3	4
Student10	4	3	4	2	3	2	3	3	1	1	3	4
Student11	4	3	3	4	2	1	2	1	3	2	1	4
Student12	3	4	2	2	3	4	4	2	3	1	3	2
Student13	1	3	4	4	3	2	2	2	1	2	1	4
Student14	3	3	4	4	3	2	2	4	2	4	1	4
Student15	4	3	2	4	3	2	2	3	2	2	1	4
Student16	3	3	1	2	1	2	2	4	3	2	4	2
Student17	2	2	2	4	3	2	2	3	1	2	1	2
Student18	4	3	4	4	3	2	2	3	2	2	3	4
Student19	2	3	3	4	3	2	2	1	2	2	1	4
Student20	3	3	4	3	1	2	2	3	3	1	3	4
Student21	4	3	1	4	3	4	2	3	2	2	3	4

An example student answer file can be downloaded from

http://www.eng.usf.edu/~kaw/MCTestAnalysis/sample_student_answers.csv
